

REMARKS

This is in response to the Office Action mailed on April 6, 2007. Further, this communication follows an interview conducted on June 29, 2007 between Examiner Hwang and Applicant's representatives Todd Fronek and Chris Volkmann. In the Office Action, claims 1-24, 26 and 30 were pending and were rejected. With this Amendment, claims 1, 9, 11, and 21 have been amended. Further, claims 2, 8, 15, and 22 have been cancelled. All remaining claims are unchanged. In view of the following, reconsideration and allowance are respectfully requested.

I. Interview

On June 29, 2007, Applicant's representatives Todd Fronek and Chris Volkmann conducted an interview with Examiner Hwang. Applicant would like to thank the Examiner for his time and consideration in conducting the interview. During the interview, proposed amendments to independent claims 1, 11, and 21, which are substantially similar to the amendments submitted herewith, were discussed. The Examiner indicated that the amendments to claims 1 and 21 would overcome their rejections. No agreement was reached with respect to claim 11.

II. Claim Rejections- 35 U.S.C. §101

On page 2, claims 21-24, 26 and 30 were rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. In particular, it was interpreted that these claims were drawn to a form of energy. With this Amendment, claim 21 has been amended to recite "[a] mobile device for handling documents." It is submitted that a "mobile device for handling documents" is clearly within the realm of patentable subject matter. The recited mobile device clearly produces a useful, concrete, and tangible result. As a result, claims 21, 23, 24, 26 and 30 are believed to meet the statutory requirement of 35 U.S.C. § 101. Withdrawal of this rejection is thus requested.

III. Claim Rejections- 35 U.S.C. §103

On page 3, claims 1-9, 21-24, and 26 were rejected under 35 U.S.C. §103(a) as being unpatentable over Buyukkokten et al. ("Seeing the Whole in Parts: Text Summarization for Web

Browsing on Handheld Devices”, WWW10, May 2-5, 2001, Hong Kong, hereinafter “Buyukkokten”) in view of Malone et al. (U.S. Pub. No. 2002/0038348, hereinafter “Malone”), and further in view of Chen et al. (“Detecting Web Page Structure for Adaptive Viewing on Small Form Factor Devices, WWW2003, May 20-24, 2003, Budapest Hungary, hereinafter “Chen”).

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some evidence, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. The evidence to make a combination must be found in the prior art, not in applicant’s disclosure. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The method of independent claim 1, as amended, recites “segmenting the document into blocks of text as a function of outline information if outline information is associated with the document” and “if outline information is not associated with the document, then segmenting the document into blocks of text as a function of tags if tags are associated with the document.” As discussed during the interview, it is submitted that the cited references, either separately or in combination, do not teach or suggest these features. In particular, Buyukkokten discloses a method of summarizing text for web browsing on handheld devices. The method of Buyukkokten is utilized after a user has searched the web and selects a particular page to explore in detail (see section 1, para. 3). After a user selects a particular web page to view, the web page is divided into “Semantic Textual Units” (STUs). The STUs are page fragments such as paragraphs, lists, or images description. A keyword and summary are identified for STUs within the selected web page. On page 4 of the Office Action, it is asserted that Buyukkokten (section 2, pages 2-4) discloses segmenting using outline information. However, the cited section of Buyukkokten states that an STU's is a page fragment such as a paragraph or an ALT tag. It does not teach or suggest segmenting based on outline information as claimed. Further, while Buyukkokten discloses fragmenting a web page, it does not teach or suggest segmenting as a function of tags if outline information is not associated with a document.

Further, Malone discloses a network for accessing distributed sites. In particular, the cited sections of Malone (sections 49, 50, 52, and 56) disclose site servers having file system accessors that parse data to extract metadata and store the metadata in a common format. Malone further discloses a parser manager that can recognize file format and access file specific parsers. The parsers extract the metadata which can be “so simple as to represent a file name or size or so complex as to represent file author or database schema information.” In other words, the metadata corresponds to information content that is retrievable in response to a search request (see paragraph 13). The metadata relates to file information such as name, size, author, content, etc. Malone does not teach or suggest segmenting a document based on outline information or tags as claimed.

Further, Chen discloses a method of organizing a web page for formatting on a mobile device. The web page analysis of Chen extracts semantic structure of a web page and identifies content blocks from the semantic structure. The web page is split based on the structure into sub-pages and a two level hierarchy including a thumbnail representation and sub-pages is generated (see section 2). The page analysis identifies sets of nodes (called “content blocks”) in the hierarchy for page splitting. Section 3.2.1 describes the method of selecting nodes and includes identifying web page layout tags such as HTML tags and headers and footers. In sum, the method of Chen teaches dividing a web page into sub-pages based on web page commands and features. Thus, Chen also does not teach or suggest segmenting based on outline information or tags as claimed.

Claim 1, as amended, also recites identifying potential segmentation points and segmenting based on the potential segmentation points if outline information and tags are not associated with the document. As discussed above, Buyukkokten discloses fragmenting a webpage into STU’s based on a structure of a webpage. Buyukkokten does not teach or suggest segmenting a document based on potential segmentation points if outline information and tags are not associated with the document. Further, Malone and Chen also do not disclose this feature. In particular, Malone relates to parsing files and does not disclose potential segmentation points as claimed. Additionally, Chen describes a method of selecting nodes that

identifies web page layout tags such as HTML tags and headers and footers. Chen also does not teach or suggest segmenting a document based on potential segmentation points if outline information and tags are not associated with the document.

Claim 1, as amended, also recites “segmenting the blocks into sub-blocks of text based on the potential segmentation points and on a similarity of text adjacent the potential segmentation points.” On page 6, the Office Action asserts that Chen discloses a similarity of text. The cited sections of Chen disclose extracting the semantic structure of a web page to be used to split the web page. However, as stated in Chen semantic analysis is performed “by inferring the content structure of a web page embedded by the web author” (section 3, third paragraph). This is done by locating explicit separators and implicit separators such as blank spaces. Chen does not teach or suggest segmenting based on a similarity of text adjacent potential segmentation points. Therefore, it is submitted that the cited references also do not teach or suggest this feature.

As mentioned above, to establish a prima facie case of obviousness the prior art references, when combined, must teach or suggest all the claim limitations. The Buyukkokten, Malone, and Chen references all fail to teach or suggest “segmenting the document into blocks of text as a function of outline information if outline information is associated with the document” and “if outline information is not associated with the document, then segmenting the document into blocks of text as a function of tags if tags are associated with the document.” Further, the cited references also do not teach or suggest segmenting based on the potential segmentation points if outline information and tags are not associated with the document or segmenting based on a similarity of text. For at least these reasons, it is submitted that the proposed combination of Buyukkokten, Malone, and Chen does not render claim 1 obvious as the combination does not teach or suggest each and every feature recited in claim 1. It is respectfully submitted that independent claim 1 and related dependent claims 3-7 and 9, which depend from claim 1, are in allowable form.

Independent claim 21, as amended, provides a document outline parsing module adapted to, for each document, “segment the document into blocks of text as a function of outline information if outline information is associated with the document” and “if outline information is not associated with the document, then segment the document into blocks of text as a function of the tags if tags are associated with the document.” As discussed above with regard to claim 1, it is respectfully submitted that Buyukkokten, Malone, and Chen do not teach or suggest this feature, either separately or in combination.

Claim 21, as amended, further recites “if outline information and tags are not associated with the document, then establish potential segmentation points in the document as a function of the text in the document and segment the document into blocks of text if adjacent paragraphs surrounding the potential segmentation points are dissimilar.” Again, as discussed above the proposed combination of Buyukkokten, Malone, and Chen do not teach or suggest this feature.

Further, claim 21 recites identifying sub-blocks of text from the blocks of text if adjacent paragraphs in the blocks are dissimilar. As similarly discussed above, the cited references do not teach or suggest this feature. Further, it is noted that Chen does not disclose identifying sub-blocks if adjacent paragraphs are dissimilar. Instead, Chen discloses finding a semantic structure of a web page based on explicit and implicit separators embedded by an author. There is no mention of a similarity or dissimilarity of paragraphs.

For at least these reasons, it is respectfully submitted that claim 21 is in allowable form. Further, it is submitted that related dependent claims 23-24 and 26 are also in allowable form at least based on their relation to claim 21.

On page 8, claims 11-19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Buyukkokten in view of Malone and Chen, and further in view of Kadayam et al. (U.S. Publication No. 2006//0259476, hereinafter “Kadayam”).

Independent claim 11, as amended, recites “providing an output of the at least one keyword and summary for each of the plurality of documents”, “receiving a user input indicative of a selection of one of the plurality of documents”, “accessing the blocks of text in the selected

document”, “determining at least one keyword and a summary for each individual block of text in the selected document”, and “rendering a list indicative of the blocks of text in the selected document, wherein the list includes the at least one keyword and summary for each individual block of text in the selected document.” It is submitted that the cited references, either separately or in combination, do not teach or suggest all of the features of claim 11.

As stated in the Office Action, Buyukkokten, Malone, and Chen do not teach or suggest rendering a list of a plurality of documents including at least one keyword and summary associated with each of the plurality of documents. On page 10, the Office Action asserts that Kadayam discloses this feature. However, Applicant submits that Kadayam does not teach or suggest “receiving a user input indicative of a selection of one of the plurality of documents” and “rendering a list indicative of the blocks of text in the selected document, wherein the list includes the at least one keyword and summary for each individual block of text in the selected document.” Instead, Kadayam teaches a system for retrieving documents over a network based on a search request. In Kadayam, a broker definition tool extracts search results and finds “essential elements” within the results. From these essential elements, the broker definition tool creates expressions (see FIGS. 16 and 18, para 0084, 0092). As can clearly be seen, Kadayam teaches a system for displaying search results comprising multiple webpages. However, while the discloses system displays summaries for multiple search results, Kadayam simply does not teach or suggest receiving a selection of one of the documents and rendering a list indicative of the blocks of text in the selected document, wherein the list includes the at least one keyword and summary for each individual block of text in the selected document.

For at least these reasons, Applicant submits that claim 11 is neither taught nor suggest by the cited references and is in allowable form. Further, it is submitted that related dependent claims 12-14, and 16-19 are in allowable form at least based on their relation to claim 11.

On page 12, claims 10 and 30 were rejected under 35 U.S.C. §103(a) as being unpatentable over Buyukkokten in view of Malone and Chen, and further in view of Emens et al. (U.S. Patent No. 6,493,744, hereinafter "Emens"). On page 13 claim 20 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Buyukkokten in view of Malone, Chen, and Kadayam, and further in view of Emens. It is respectfully submitted that claims 10, 20 and 30 are allowable at least based on their relation to claims 1, 11 and 21.


IV. Conclusion

In view of the foregoing, it is respectfully submitted that all pending claims, namely claims 1, 3-7, 9-14, 16-21, 23, 24, 26 and 30, are in allowable form. Reconsideration and allowance are respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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